

SBR No. 44/17-18

DATED 22/6/2017

No. & Final Bill

Original/Duplicate/Triplicate
CONTRACT CERTIFICATE
(For Other Works)Date: 22/6/17
EE/ELE/Y/BR-NO. 22-6-17Division: **Electricals (Yelahanka)**Sub-Division: **Electricals**

Bill Received No.

Dated

Divisional

Cash Book Voucher No. Dated

Sub Divisional

Job Code :-11-17-000044

Schedule Docket No.

Head of Account : P 3110

D.R.No. :

Name of Work : *Providing and Fixing of LED Street Lights Ward No-11 in Byatarayanapura Division.*Name of Contractor and Full Address: **M/S Chaitanya Electricals,**

Reference to Agreement No: EE/Ele/YZ/WO/ 10 /17-18

Date: 3/05/2017

Certified that the measurements were taken by me on 22/6/2017 and recorded of Pages 311375 to 384 of measurement Book No. 311417-8 and that the work is satisfactorily executed.

Contractor

Officer-in-charge of work

Certified that the measurements were taken by me on 22/6/2017 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

II Memorandum of Payment

Assistant Executive Engineer (Ele)

Sub Divisional Officer

1) Total value of work done or supplies made as per account within	Bill	10.20.505=00
2) Deduct amount to be held in reserve being percent Rs.	IT 1%.	10.205=00
3) " " Balance	VAT 4%.	40820=00
4) Deduct Payment:	h.w.c. 1%.	10205=00
a) Amount of previous payment as in the Office Cash Book Voucher	Amount	1021=00
No. Dated. S.D. No.	C.B.F.D. 1%.	62.251=00
adjusted towards cash advance recovery of	deductions	9.58.254=00
b) Payments } cost store or other material supplied.	Chavve	
Now made } recovery of amount creditable to this/other work		
Amount paid on this bill Cheque / Cash.		
5) Balance being unpaid value of work done held in reserve.		
6) Deduct cash advance made on the Office cash Book Voucher No.		
dated. less adjustments.		
7) Net amount due to or from Contractor		
unadjustments items.		
8) Advance to Contractor for materials brought to site (as detailed) within.		
9) Value of Government materials supplied.		

Total amount adjusted -

Contractor's Signature

Received Rs. (in words)

For Chaitanya Electricals

by cash and by adjustment of Payment as per memorandum

(in final settlement of all demands)

(For use in the Office)

Witness

For Chaitanya Electricals

1.

2.

Dated Signature

Paid by me by Cheque No. Dated.

Cash Rs.

Dated.

Initials of Officer making payment

Stamp

P 3110 14th Finance grant
10.20.505/-
9.58.254/-
62.251=00Executive Engineer
ಕ.ಪ.ಆ.ಆ.(ಎ) ಯು.ಕಂ.ಕೆ. ಮೆ.ಕೆ.

Sl. No	Description of Item	Unit
	Name Of Work:- Providing and Fixing of LED Street Lights Ward No-11 in Byatarayanapura Division.	
1	LED Street light. Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house	each
2	Supplying & fixing of 32 mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 or rail or RCC pole/wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires complete. Using 32mm dia G.I pipe	Each
3	Wiring for lighting / power circuit using one of pvc insulated 1100v grade stranded aluminum unsheathed wire single core cable in open or concealed system of wiring as per IS - 694 : 19904sq mm	Per Mtr
4	Supplying of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all aluminum Alloy, Phase Conductor is insulated with XLPE Compound, insulated Messenger with specified IS-14255:1995 & confirming to GTP of GROUP-A.2 X 16 + 1 X 25 SQ.MM	Per Mtr
5	Stringing of 1.1kv LT Aerial Bunched Cable, BESCOM SR	Per Mtr
6	Micro processor based electronic timer consisting of Display Unit(LCD), built in Real Time Clock (RTC) and keypad with option to operate relay/contactors in programmable mode (pre-defined ON/OFF time) or astronomical mode (based on sunset and sunrise depending on the latitude and longitude of the location of installation of Switch) or based on Intensity of natural light (lux level using IR sensor), built in software to select the mode of operation by the user	Each
7	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	Each
8	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and wiring complete as required. 40-63 Amps SP	Each
9	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and Copper conductor single core cable in open or concealed system of wiring. I Group A Materials. g) 16 sqmm	Per Mtr
10	Supplying and fixing hylum brand hand plastic sheet 3mm thick with necessary niches for fixing switches, regulators etc., and fixing on existing wood or metal box using N.F.screws.	SqCm

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		52	~~11.000/-~~ <u>11800.00</u>	~~572000~~ <u>613600.00</u>	52	~~5.72000/-~~ <u>613600.00</u>	
		102	200.00	20400.00	102	20400.00	
		535	2.00	1070.00	535	1070.00	
		520	50.00	26000.00	520	26000.00	
		520	10.00	5200.00	520	5200.00	
		6	7000.00	42000.00	6	42000.00	
		6	7000.00	42000.00	6	42000.00	
		6	600.00	3600.00	6	3600.00	
		20	10.00	200.00	20	200.00	
		1350	0.10	135.00	1350	135.00	

11	Open Conduit System: Supplying heavy gauge PVC conduit pipe,..... dia confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or plug in case of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. c) 32mm dia 2.5mm thick	Per Mtr
12	Supplying and fixing angle iron frame work fabricated out of M.S angle iron... and M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a) 50X50X6 mm	mtr
13	Supplying and stringing of ACSR Conductor (6/2.59mm Al + 1/2.59mm Steel).	Per Mtr
14	1.1 KV Pin Insulator	Each
15	2 Pin 45x45x5mm -510mm	Each
16	Supply and installation /fixing/Provision of outdoor type thermoplastic modular panel enclosure with transparent polycarbonate lid, shock proof, IP 65(weather proof) rust proof, water proof, corrosin proof having internally embedded gasket on both lid and flap suitable to fix. single phase/energy meter in suitable base plate and having a provision for fuse/ MCB cutout with suitable transparent hinged flap opening MCB along with complete tamper proof SEALING facility. 300x450x214mm.	Each
17	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets. 200mmx200mmx98mm	Each
18	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a) 40X40X6mm	Per Mtr
19	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE 100Amps 25kA.	Each
20	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. GI strip 25x3mm	Per Mtr
	Total Rs	

Certificate: 1. Certified that the Above Work has been carried out satisfactorily

T. N. Baddy
Offy

[Signature]
 Assistant Executive Engineer (Ele)
 Bangalore

		220	20.00	4400.00	220	4400.00	
		19	50.00	950.00	19	950.00	
		495	30.00	14850.00	495	14850.00	
		15	20.00	300.00	15	300.00	
		15	120.00	1800.00	15	1800.00	
		6	1500.00	9000.00	6	9000.00	
		30	1000.00	30000.00	30	30000.00	
		30	²⁰ <u>50.00</u>	^{600/-} <u>1500.00</u>	30	^{600/-} <u>1500.00</u>	
		30	^{8200/-} <u>5500.00</u>	^{2,146,000/-} <u>165000.00</u>	30	^{2,146,000/-} <u>165000.00</u>	
		0	20.00	0.00	0	0.00	
				<u>982005.00</u>		<u>982005.00</u>	

10,20,505/-

10,20,505=00